U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Southside Chattanooga Lead - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #8**
Residential Soil Removal Continues
Southside Chattanooga Lead

Chattanooga, TN
Latitude: 35.0333793 Longitude: -85.3057271

To: Jim Mc Guire, ERRB Reg 4

From: Perry Gaughan, On Scene Coordinator
Date: 1/28/2013
Reporting Period: Jan 7th through Jan 19th 2013

1. Introduction

1.1 Background

Site Number:	B4J4	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	8/19/2012
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	9/17/2012	**Start Date:**	9/24/2012
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Lead contaminated soil on 52 properties being removed as a time critical removal under CERCLA.

1.1.2 Site Description

The Tennessee Department of Environmental Conservation (TDEC) requested the EPA Region 4 Emergency Response and Removal Branch's (ERRB's) assistance after discovering that the lawns of one residence and potentially several more were contaminated with lead along Read Avenue near downtown Chattanooga. Initially, one resident along Read Avenue presented to the emergency room with severe fatigue and abdominal pain. Emergency room blood work indicated lead levels approaching 20 micrograms per deciliter (ug/dl) which alerted TDEC to conduct follow up assessments. TDEC requested assistance from ERRB to characterize the soil around the home and an initial assessment was conducted with SESD (Science and Ecosystem Support Division) Athens in which three homes were assessed as well as a public park and playground area at 1700 Mitchell Avenue. Ten samples were collected and two samples showed elevated lead levels exceeding 400 ppm.

1.1.2.1 Location

The Southside Chattanooga Lead Site is located along Read, Mitchell and Carr Avenues south of Main Street in Chattanooga, Hamilton County, Tennessee (Latitude: 35.0456, Longitude: -85.3097). The area is a blend of young, middle income couples who are renovating older constructed homes and low to middle income retired couples who have resided in the area for 20 plus years. The vast majority of homes were built in the early 1900's.

The Southside Chattanooga area is immediately adjacent to downtown Chattanooga and was prone to flooding during the early 1900's and prior to the development of damming and flood control measures by the Tennessee Valley Authority (TVA). Several of the homes along Read and Mitchell Avenues appear to have been built on 4-5 feet of clay fill.

1.1.2.2 Description of Threat

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In response to a request from TDEC, the EPA Region 4 ERRB with assistance from SESD Athens, conducted two follow up assessments of the Read and Mitchell Avenue area in January and April 2012. Of the 81 homes (162 front and back yards) assessed near downtown Chattanooga, 68 lawns (42 %) have lead levels exceeding 400 ppm. Lead levels range from 400 – 4000 ppm. The 4000 ppm sample was collected from a lawn along the 1600 block of Read Ave and the sample contained very dark fine material, most likely a high concentration of bag-house dust.

In addition, the Battle Academy Elementary School which neighbors the site was sampled in mid June 2012. A 20' by 20' grid was laid over the school property and 140 grids were screened using X-ray fluorescence spectroscopy (XRF). No significant lead contamination was found and all lead levels were below 55 ppm.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Jan 7th through Jan 12th, 2013

During the week of January 7th, the ERRs crew removed fencing between 1719 and 1721 Read Ave as well as removed vegetation near contaminated areas prior to removing contaminated soils from between the two homes. On Jan 8th, ERRs began removing contaminated soils from the backyards of 1719 and 1721 Read Ave and approximately 120 cubic yards of contaminated soil were removed from both yards over a two day period. Heavy rains fell the remainder of the week limiting backfilling operations at 1719 and 1721 Read.

The OSC and Start contractor conducted additional assessment activities around the foundation of 1605 and 1607 Read Ave to further define areas of contamination. The OSC further tasked Start to photodocument the exterior of 1607 Read because of obvious structural failures in the exterior brick wall at several corners of the structure. Start was instructed to consult with their corporate structural engineers and advise the OSC on 1607's structural integrity during excavation activities.

START contractors continue to assist with technical support, daily operations, post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf) and air sampling during excavation and staging of contaminated soils.

Jan 14th through Jan 19th, 2013

During the week of January 14th, ERRs contractors continued removal actions in the Southside subdivision of Chattanooga, Tenn. Rain during the beginning of the week limited soil removal operations.

On Tuesday, Jan 15th, OSC Kevin Eichinger reviewed health and safety procedures and air sampling

results for the first six weeks of the removal. OSC Eichinger agreed with the OSC/Start interpretation of air result findings to date and measures to modify excavation activities to Level C protection if areas exceeding 7500 ppm lead were identified during excavation. No significant safety or air monitoring issues were noted. A few minor additions and amendments to the HASP were suggested and implemented by the OSC.

On Wednesday, Jan 16th, the OSC requested START subcontract a structural engineer to advise the OSC on excavation activities near the older homes along Read and Mitchell Avenues. Recent rains have completely saturated the soil and a number of homes along Read Ave were constructed during 1895 to 1905 with a shallow flagstone foundation.The structural engineer from URS Inc. visited the site to view residential structures of concern, primarily 1607 Read, 1622 Read, and 1623 Read. Other homes assessed included 1619 Read and 19 E. 19thStreet. ERRs project manager accompanied the engineer during the home inspections. The structural engineer stated the most dilapidated homes were 1607 Read and 1622 Read, and suggested vibration testing and to make efforts to avoid the foundation. A formal report will be submitted to OTIE on Monday, Jan 21st.

On Jan 17th, START and ERRs contractors walked the neighborhood to determine if any properties had ponding water/flooding issues due to heavy rainfall. ERRs noted that the south side of 1622 Read Avenue will require a french drain during soil removal.

On Jan 18th, operations began at 0900 due to potential ice on roadways. ERRS exposed the clay and topsoil backfill material to heat – three cylindrical heaters were placed within a valley in the soil piles and tarped, allowing for air flow through the tent. The soil piles were exposed to heat for several hours to allow the soil to dry in an effort to have backfill material ready for placement the following work period.

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. START contractors continue to assist with technical support, daily operations and post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf).

2.1.2 Response Actions to Date

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

No information available at this time.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				

ERRS - Cleanup Contractor	$1,300,000.00	$780,000.00	$520,000.00	40.00%
TAT/START	$100,000.00	$55,000.00	$45,000.00	45.00%
Intramural Costs				
Total Site Costs	$1,400,000.00	$835,000.00	$565,000.00	40.36%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.